

Watersheds

A watershed is the land that water flows across or under on its way to a stream, river or lake and is nature's way of dividing up the landscape. New England includes many eco-systems that, by virtue of their ecological value, recreational value, or proximity to large populations, hold a special significance to us. EPA New England is focusing particular attention and resources on these special places. Working closely with our federal, state and local partners, these community-based initiatives are delivering tangible environmental improvements to these watershed areas.

► EPA Contact

Bill Walsh-Rogalski (617) 918-1035 walshrogalski.william@epa.gov

► Charles River Watershed Association Contact

Ariel Dekovic (781) 788-0007



Customer Call Center 888-372-7341 www.epa.gov/region1

Fact Sheet/May 2005

Charles River



What Makes the Charles River Watershed Special?

▶One of the busiest recreational rivers in the world, the lower Charles is lined with boat houses, sports fields, and performance facilities and attracts 20,000 users daily and up to a half-million people for special events.

Why is the River Polluted?

- ► Stormwater runoff, sewer overflows and illegal sewer tie-ins carry bacterial pollution to the river.
- ► In 1995, swimming standards were met only 19% of the time, and boating standards met only 39%.
- ►In 2004, the river met standards 54% and 96% respectively.

What is the "Clean Charles Initiative"?

The "Clean Charles Initiative" aims to make the Charles River swimmable and fishable.

Report Card

► In spring of 2005, EPA issued its annual report card for 2004 on the river's health, giving it a B+, the best yet and a great improvement from a D in 1995. The score is based on monthly monitoring results from the Charles River Watershed Association.

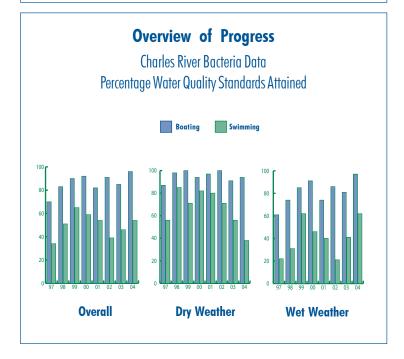
2004		
1995		D
1996		<u>C-</u>
1997		<u>C</u>
1998		B-
1999		В
2000		В
2001		B
2002		B
2003		B-
2004		B.
100	Goal	A

Progress/Goals for the Future

What Partnership Progress has Been Made?

- ► Many stormwater discharges to the river were inspected for illegal connections. Over 1 million gallons of contaminated flow eliminated per day. Also, over 18 miles of leaking sewer lines were replaced in Waltham and Newton.
- ► The Watershed Institute continues a program with 9 high schools in the lower Charles to monitor water quality, and bird and insect diversity near the river.
- ► Enforcement settlements include projects to restore the Charles River. One major development project at MIT includes stormwater management.
- ► Major progress made on combined sewer overflow (CSO) controls including work to separate stormwater and sewer lines in Stony Brook area, closure of outfalls, and dechlorination of the Cottage Farm CSO facility.
- ►USGS's 2002 study on contamination loads to the lower Charles indicates stormwater remains a major source. Wet weather illicit discharges are now a primary focus of stormwater management.
- ► Eutrophication study underway.
- ▶ Draft permit issued to Mirant Power.
- ► Hotspot monitoring program identified numerous illicit discharges supporting an enhanced illicit discharge removal program.
- Settlement SEP with NSTAR results in innovative "smartstorm" cistern installation at Harvard vehicle washing facility.
- ► USGS produces Watershed Atlas of the Lower Charles.

Charles River Watershed V Charles River Basin Boundary N Charles River Major Hydrography Town Lines



Watersheds



What Major Actions are Planned for the Future?

- ► Conduct hot spot monitoring throughout watershed.
- ► Work with communities to eliminate all illicit connections.
- ► Work with MWRA to eliminate all CSOs causing water quality violations.
- ▶ Work with state to address sediment contamination and possible remedies.
- ► Address Millers River drainage problems.
- ► Issue thermal discharge permits for power plants.
- ▶ Develop plan to reduce eutrophication (algae growth).

Who are the Partners?

EPA New England • MA Department of Environmental Protection • MA Executive Office of Environmental Affairs • MWRA • Boston Water and Sewer Commission • Town of Brookline • City of Cambridge • Town of Dedham • Town of Needham • City of Newton • City of Waltham • Town of Watertown • Town of Wellesley • Town of Weston • Metropolitan Area Planning Council • Boston Harbor Association • Charles River Watershed Association • Conservation Law Foundation • Friends of the Muddy River • Restore Olmstead's Waterway • Save the Harbor/Save the Bay • Watertown Citizens for Environmental Safety • Boston University • Brandeis University • GZA • Genzyme • Harvard University • Ionics • Massachusetts General Hospital • MIT • Netcasters, Inc. • Northeastern University • Polaroid • Stop & Shop • Triumvirate Environmental • USGS • New England Interstate Water Pollution Control Commission • Urban Ecology Institute • Pfizer

Want More Information?

- ▶www.epa.gov/region01/charles/
- ►www.crwa.org
- ►www.usgs.gov/charles_river
- ►www.cleancharles.org



Customer Call Center • 888-372-7341 • www.epa.gov/region1

Note: EPA New England offers businesses and municipalities information and assistance to improve compliance with environmental laws and be better stewards of their local environment. Please call to learn how EPA can help.